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INFLUENCE OF FORMAL MICRO-CREDIT ON THE SOCIO-ECONOMIC WELFARE OF FARMERS IN EBONYI STATE, NIGERIA

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ABSTRACT
This study analysed the influence of formal micro-credit on the socio-economic welfare of smallholder farmers in Ebonyi State, Nigeria. A total of 180 farm households were randomly selected from 12 autonomous communities. Structured questionnaire and interview schedules were the major instruments used for data collection. Data collected was analysed using both descriptive and inferential statistics. Descriptive statistics such as the mean, tables, percentages, etc and inferential statistics such as logit test and regression analysis were used for the specific objectives. A logit econometric model was used to quantify and analyse the data obtained on factors that influence farmers' access to formal micro credit. The result of the analyses showed that variables like annual income, marital status and farmers' main occupation influenced their access to formal micro credit and were significant at 5% level of significant. It was equally observed that the amount of formal micro credit obtained was positively and significantly correlated with annual farm income. It also observed that 41% of the borrowers had tangible assets that valued higher than N150,000.00 when compared to non-borrowers who were only 5%. The major constraints identified were mandatory minimum savings; late release of funds; inability to provide CBN guarantee certificate and lack of security/collateral. It was recommended that government in collaboration with private individuals should establish a wider network of microfinance banks to serve for the specific credit needs of the farmers.

KEYWORDS: Formal, Micro-credit, Socio-Economic, Welfare Farmers

INTRODUCTION
Robust economic growth cannot be achieved without putting in place well focused programmes to reduce poverty through empowering the people by increasing their access to factors of production especially credit (Hulme and Mosley 1996). The latent capacity of the poor for entrepreneurship would be significantly enhanced through the provision of microfinance services to enable them engage in economic activities and be self reliant; increase employment opportunities, enhance household income and create wealth (Shama and Zeller, 1997). Micro finance is about providing financial access to poor whoa re traditionally not sewed by the conventional financial institutions. Three features distinguished micro-finance from other formal financial products, these are; the smallness of loans advanced and or savings collected; the absence of asset-based collateral and simplicity of operations.

In Nigeria, the formal financial system provides services to about 35% of the economically active population while the remaining 65% are excluded from access to financial services (Vega and Rodriguez, 2004). This 65% are often served by the informal financial sector, through Non-governmental organisations; microfinance institutions, money lenders, friends, relatives and credit unions.

Microfinance is the supply of loans, savings and other basic financial services to the poor, improves their welfare and alleviate the capital constraints on agricultural households (Diagne, 1996 and UNDP 2004). The owners of micro and small enterprises require a diverse range of financial instruments to meet working capital requirements, build assets, stabilize consumption and shield themselves against risk.

Table 1: Percentage Distribution of Respondents According to Tangible Asset ownership

	Borrowers		Non-Borrowers	
Types of Asset	Frequency	Percentage	Frequency	Percentage
Land Holdings (only)	18	30	75	62.5
House and other rented buildings	33	55	40	33.3
Lives to ck/poultry	6	10	4	3.3
Other agricultural equipments	3	5	1	0.8
Total	60	100	120	100

Source: Field Survey, 2007

Table 2: Percentage Distribution of Respondents According to values of their Productive assets

	Borrowers		Non-Borrowers	
Value of Assets (₦)	Frequency	Percentage	Frequency	Percentage
1000 – 60,000	9	15.10	35	29.10
61,000 – 120,000	16	26.40	56	46.70
121,000 – 150,000	10	16.70	23	19.20
150,000 and above	25	41.80	6	5.00
Total	60	100	120	100

Source: Field Survey, 2007

Table 3: Logit Estimates of the Socio-Economic Variables of Respondents that influence their Access to formal micro-credit

Variable	B.Statistics	Standard Error	Significance
Constant	-1.257671**	2.028191	0.5352
AGE	-0.50524	0.27668	0.0678
EDLE	-0.028768*	0.052494	0.5832
SEX	-1.186202*	0.406816	0.0035
ANIN	0.000161*	0.000499	0.0012
MAST	1.468171*	0.514442	0.0043
MAOC	0.053131	0.140512	0.7053
ANFI	-0.000123	0.000067	0.8542

Statistics
No of observations – 180, Mc Fadderis R^2 = 0.2229, Log likelihood function = 89.0229, Total number of iterations = 7, * Significant at 0.01 level

Table 4: Frequency Distribution of Farmers according to Factors limiting their chances to access formal credit

Constraints	Frequency	Percentage
Interest rate	8	09
Mandatory minimum savings	59	35
Lack of security/collateral	27	15
Short loan duration	18	10
CBN guarantee certificate	23	11
Late release of fund	42	20
	152*	100

Source: Field survey, 2007
* Multiple responses obtained.

Despite the fact that about 80 percent of Ebonyians live in rural areas and are involved in agricultural activities, there are no efforts to facilitate credit to farmers, which is crucial for rapid development of this dominant section of the population. The only available bank which carters for the specific credit needs of small-scale farmers are, the few micro-finance banks and the Nigerian Agricultural co-operative and Rural Development Bank (NACRDEB). The inadequacy in financing and credit arrangement in the State impede development of agriculture and other rural sectors. Given that this sector is the mainstay of a large segment of the populace, its poor performance makes the fight against poverty even more challenging.

In view of these problems, the study sort to address the following problems.

- How relevant are the operational procedures and conditionalities of existing formal credit arrangements to the needs and aspirations of small-holder farmers and to the sustainability of the credit arrangements.
- What socio-economic factors influence accessibility to formal credit by small-holder farmers?
- Has credit from formal micro-credit institutions got any potential impact in increasing incomes and improving livelihood of the credit users?
- What are the constraints encountered by farmers in obtaining loan from the formal micro-credit sources.

Broadly, the objective of the study was to assess the influence of formal micro-credit on the socio-economic welfare of farmers in Ebonyi state. Specifically, the objectives are to: characterize both formal micro-credit borrowers and non-borrowers according o their personal and socio-economic attributes; determine the relationship between socio-economic characteristics of the respondents and their access to formal micro-credit; assess the effect of formal micro-credit obtain on their income, level of tangible assets acquired and value of the farmers assets; analyse the constraints to formal micro-credit acquisition in the study area.

METHODOLOGY

The study area is Ebonyi State. It has a population of 2,173501 people (NPC, 2006). The state is made up of thirteen (13) gazetted Local Government Areas which are divided into 3 Agricultural zones.

A multistage random sampling technique was employed to select 2 local government areas from each of the three zones. From each of the six local government areas (Ezza-south, Ikwo, Ohaozara, Afikpo, Abakaliki, Ohaukwu), 2 autonomous communities were randomly selected. This gave a total of twelve (12) communities. Then the third stage involved a random selection of fifteen (15) farmers from each of the twelve communities sampled, giving a total of one hundred and eighty (180) respondents for the study.

Data for analysis were collected primarily using interview schedule and questionnaire which were administered to the one hundred and eighty (180) respondents.

The data obtained were analysed using descriptive statistics (such as means, frequency and percentages) and inferential statistics (logit test and regression analyses).

RESULTS AND DISCUSSION

The results of the data analysed showed that farmers that borrowed from the formal micro-credit institutions (30%) had only land as their tangible assets while 62% were non-borrowers who also had land as their tangible asset; this implies that farmers who have land holdings borrow less. This was in line with findings of Ofuru (2006) who opined that smallholder farmers do not frequently access loan formal financial institutions. In addition to this, 55% of the borrowers have houses and other rented buildings while 33% are non micro-credit borrowers have only houses as their tangible assets, five percent (5%) of the borrowers had other agricultural equipments like tractors and even livestock enterprises in addition to their crop farms (table 1).

It was observed again that 41% of farmers who borrowed from the formal micro-credit institutions have tangible assets (land, livestock, buildings, and non-farm productive assets like gain processing machines) worth more than 150,000 while only about 5 percent of the non-micro-credit borrowers have tangible assets. This was exemplified in (table 2). It became obvious that farmers that borrowed from the available micro-credit institutions were able to acquire tangible assets more than the non formal credit borrowers.

The logit estimation of the relationship between socio-economic characteristics of the respondents and their assess to formal micro credit, it was evidenced that annual income, martial status and main occupation were the primary attributes of these farmers that positively influenced their chances to access credit from the formal micro-credit sources. This was explained in table (3), while those attributes like age, level of education, and gender had less effect.

This result is in agreement with earlier findings of Diagne and Zeller (2001), who deduced that generally the very poor are reluctant to access credit from the formal institutions because of fear of crop failure and foreclosure. They also went ahead to state that the type of activity and investment requirements could influence individual decisions to request for additional money and hence, access credit.

An estimate of factors that constrained farmers' access to formal-micro credit revealed that mandatory minimum savings (35%), lack of security/collateral (15%), short loan duration (10%), CBN guarantee certificate (11%) and late release of funds were the major factors constraining farmers from accessing credit from the formal micro-credit institutions.

The study went further to estimate the relationship between the amount of loan a borrower obtained and his annual farm income in order to exclude the cumulative effect of non-farm income from the actual income which is as a result of non-farming activities.

The coefficient was 1.11 with a standard error of 0.10. The coefficient tested highly significant at 1% level. The R^2 was 0.676 while the adjusted R^2 was 0.670. This implies that there is 67% increase in annual farm income of the borrowers as a result of the loan obtained from the formal micro-credit institutions. The F-ratio was 121.09 and tested highly significant at 1% level.

The estimated regression equation was

$$\text{ANFI} = \underset{(14311.71)}{-29350.67} + \underset{(0.100920)^{*}}{11057}$$

R^2 = 0.676
R^2 = 0.67
F-ratio = 121.09

The figures in brackets are standard errors of estimates.
* Significant at 1% level.

SUMMARY, CONCLUSION AND RECOMMENDATION

From the logit regression analyses, it was observed that such variables like annual farm income, marital status and main occupation influenced farmers' access to formal micro-credit in the study area. However, in terms of the influence of the loan obtained on the socio-economic welfare of the farmers it was observed that farmers who obtained these loan had higher level of productive assets which were also valued higher as compared to non-participating farmers. Results of regression analysis also showed that the amount of loan obtained was positively and significantly correlated with the annual farm income of the farmers when tested at 1% level of significance and 99% confidence level. The major factors constraining farmers' access to micro-credit were mandatory minimum savings, lack of society/collateral and late release of funds.

Based on the findings, several policy recommendations were made which included that there should be establishment of a wider network of microfinance banks to serve the farming sector; there should be provision of training to credit beneficiaries in aspects of credit management, savings mobilization and basic accounting; the full potential of credit in increasing the welfare of poor farmers can only be realized with adequate investments in hand and soft infrastructure for example good roads, telecommunication networks, schools, portable water as well as investment in human capital.

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